

AMENDMENTS TO SPECIFICATION

Please replace Paragraph one, on Page six of the specification with the following amended paragraph:

The engine drives a positive displacement, duocentric pump 50. A control body 52 and pump body, containing various hydraulic control valves and fluid passages, surrounds the pump 50. The pump 50 includes an internal rotor gear 54 supported rotatably, the rotor having nine exterior teeth. An external stator gear 56 having ten internal teeth or lobes meshes with the internal rotor and is fixed to the pump cover. The impeller 38 and internal pump rotor 54 rotate at the speed of the engine shaft. Spaces between the meshing teeth of the internal rotor 54 and pump stator 56 are pumping chambers in which fluid travels about the axis of the pump from the inlet of the pump to the outlet. Fluid in those spaces is compressed as the volume of the spaces decreases from the inlet to the outlet due to rotation of the rotor within the stator. Pump 50 is supplied with fluid from an oil sump or reservoir 20, 58 through a suction filter 60, and with fluid contained in a passage 62 leading to the pump inlet from a main regulator valve 64.

Please replace Paragraph one, on Page seven of the specification with the following amended paragraph:

Cooler bypass valve 102 includes a spool 104 that is movable within a chamber 106 due to the force of a compression spring 108, which biases the spool upward against the stem 110 of a thermostat 111, which senses and responds to the temperature of the transmission fluid. When the temperature of the hydraulic fluid is elevated to its normal temperature range, stem 110 is extended to the position shown in Figure 3, and land 112 closes or blocks a connection through valve 102 between an inlet port 116 and outlet port 114. Outlet port 114 is connected through passage 118 to lubrication fluid connections 120 and 138.

Please replace Paragraph one, on Page eight of the specification with the following amended paragraph:

Supply line 34 connects port 126 to the oil cooler 28 and to a pressure-side filter 132, arranged in parallel with cooler 28. Fluid passing through the cooler 28 and filter 132 enters a rear lube circuit 134, a center lube circuit 136, and a front lube circuit 138. The lubrication circuits, which are located within transmission case 12, supply lubricant to friction surfaces on various shafts, bearings and journal surfaces of the transmission. Lubrication fluid returns by gravity to the oil pan or reservoir 20, 58 after exiting the lubrication circuits.

Please replace Paragraph three, on Page eight of the specification with the following amended paragraph:

When the engine is running and the transmission oil temperature is relatively high, lubrication fluid is supplied to the cooler 28 and filter 132 from the converter apply source 9692. The path between the converter apply source 9692 to the cooler 28 and filter 132 includes sequentially valve 152, passages 154, 88, valve 64, passage 86 valve 70, passages 140, 124, case out port 16, 126, and fitting 30. Lube fluid leaving the cooler and filter is delivered to the lube circuits 134, 136, 138. The connection to front lube circuit 138 is made through lube port 120 and passage 118. A connection between ports 114 and 116 through the cooler bypass valve 120 is closed by land 112.

Please replace Paragraph one, on Page nine of the specification with the following amended paragraph:

When the engine is running and the transmission oil temperature is relatively low, lubrication fluid is supplied to the cooler 28 and filter 132 from the converter apply source ~~96~~92 through the path described above. A lubrication fluid path, parallel to the path that supplies cooler 28 and filter 132, is opened between ports 114 and 116 through the cooler bypass valve 102. The flow rate of lubrication fluid through the cooler and filter is low due to the high viscosity of the transmission oil at low temperature. Lubrication fluid exiting case out port 142 of the anti-drain back valve 70 enters cooler bypass valve 102 through passages 124, 122 and port 116, exits valve 102 through port 114, and flows to the lubrication circuits 134, 136, 138.

Please replace Paragraph two, on Page nine of the specification with the following amended paragraph:

When power is off, i.e. when the engine and pump 50 are stopped, spool 72 of the converter anti-drain back valve 70 moves downward within its chamber due to the force of spring 76. This movement causes land 80 to open a connection between oil cooler 28 through line 34, passages 124, 140, and port 142 to the fluid reservoir 20, 58. Exhaust port 144 connects port 142 through the valve chamber 74 to the fluid reservoir 20, 58. In this way, lubrication fluid contained in the cooler supply line 34, as well as any fluid contained in the cooler 28 at an elevation above the cooler fittings 30, 32 returns through valve 70 to the oil reservoir 20, 58 because the cooler fittings and the line 34 are located at a higher elevation than that of the oil pan and fluid reservoir 20, 58.